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## A new species of *Solierella* SPINOLA, 1851 from Greece (Hymenoptera, Crabronidae)

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**A b s t r a c t :** *Solierella graeca* SCHMID-EGGER & ARENS nov.sp. is described from the Peloponnes in Greece. Holotype is a male, the female is unknown. The species is characterized by 12 antennal segments in combination with a black pronotum and a black forefemur.

**K e y   w o r d s :** Hymenoptera, Crabronidae, *Solierella*, new species, Greece.

### Introduction

Five european species of *Solierella* are revised and keyed by SCHMID-EGGER & BITSCH (2007). During intensive research in the Peloponnese (Southern Greece), the junior author found some *Solierella* males which do not agree with any of the species described from the Palearctic region. The examination was possible due to the revisional works of the senior author of *Solierella* in the Palearctic region. The species was recognized as new to science and is described here.

### Material and methods

Examined material was collected by Werner Arens. The holotype is deposited in the Zoologische Staatssammlung München (ZSM), Germany, remaining types are in the collections of the authors (CSE = C. Schmid-Egger, Arens = W. Arens). Morphological terms are used according to BOHART & MENKE (1976). The following abbreviations are used in the morphological descriptions: AS = Antennal segment.

### Taxonomy

#### *Solierella graeca* SCHMID-EGGER & ARENS nov.sp.

Holotype: Greece: male 10.vii.2001, Peloponnes, Kotili, Oros Likeo, Gipfelregion/1100-1400 m (leg. Arens, coll ZSM).

Paratypes: Greece: 2 males 23.vi.2016 Chelmos-Gebirge, Felsweg östl. des Xerokambos/1500 m; male 12.vii.2008 Oros Parnon, Ag. Petros, Meg. Tourla 1600-1700 m; male 24.vi.2008 Oros Killini, Ano Trikala, oberhalb EOS-Hütte II/1600-1900 m (all leg. Arens).

**D i a g n o s i s :** The male is unique by 12 AS and by a black pronotum, in combination with black forefemora and by a shiny propodeal enclosure. Interspaces on mesonotum

are as large or somewhat larger than puncture diameter, and hypoepimeral area is punctless and shiny. Another species (male) with 12 AS and black pronotum is *A. andradei* DE BEAUMONT, 1957 from northwest Africa and Sicily. It can be distinguished by a densely punctured hypoepimeral area and by a large yellow spot on forefemur. Remaining species with 12 AS in males all have pronotum with yellow band.

**D e s c r i p t i o n :** Holotype male: Body length 3.8 mm. **Colour:** Black, yellowish-brown are: antenna below (brown above), apical half of mandible, tegulae, wing venation, base and apex of tibia, tarsi. Ivory white are: pronotal lobe, metanotum, spot on hindtibia basally (as long as 0,2x tibial length). Lower face covered with sparse silver pubescence, somewhat denser along inner eye margin. **Morphology:** Apical clypeal margin with triangular tooth. Frons grainlike sculptured with indistinct punctation. Antenna with 12 AS, last AS as long as previous one. Scutum, scutellum and lower mesopleuron with dense punctuation, interspaces shiny, punctures 1-1.5 diameters apart. Propodeal enclosure shiny, with some basal and longitudinal striae, apically with transverse striae. Hypoepimeral area shiny, laterally with a few punctures.

Variation: Paratypes between 3.2 and 4.0 mm. Two of them are also darker: pronotal lobe black, legs mostly black with brown tarsi, tibiae lacks basal and apical pale spots, white band of metanotum is medially interrupted by narrow black spot.

The female is unknown.



**Fig. 1:** *Solierella graeca* nov.sp.: male paratype, dorsal view.

**Habitat:** *S. graeca* nov.sp. is obviously a mountain species on the Peloponnes. All specimens have been found on the ground in alpine meadows or mountain pastures (e.g. Fig. 3), in two cases under small conifers.

**Geographic distribution:** Peloponnes in southern Greece.

**Ecology:** The species is named after its origin Greece.



**Fig. 2:** *Solierella graeca* nov.sp.: head and antennal segments.

### Zusammenfassung

*Solierella graeca* SCHMID-EGGER & ARENS nov.sp. wird von der Peloponnes in Süd-Griechenland beschrieben. Der Holotypus ist ein Männchen, das Weibchen ist unbekannt. Die Art ist gekennzeichnet durch 12 Fühlerglieder in Kombination mit einem schwarzen Pronotum und einem schwarzen Vorderfemur.

### References

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SCHMID-EGGER C. & J. BITSCH (2007): Genre *Solierella* SPINOLA, 1851, p. 294-302. — In: BITSCH J., DOLFFUSS H., BOUCEK Z., SCHMIDT K., SCHMID-EGGER C., GAYUBO S.F., ANTROPOV A.V. & Y. BARBIER (2007), Hyménoptères Sphecidae d'Europe occidentale. Volume 3. Seconde édition mise à jour. Faune de France **86**: 479 pp.



**Fig. 3:** Der Fundort von *Solierella graeca* nov.sp. am Osthang des Chelmos-Gebirges in etwa 1500 m Höhe, östlich und etwas unterhalb des Xerokambos.

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